

Case 2921

Trigonocephalus pulcher Peters, 1863 (currently *Bothrops pulcher*) and *Bothrops albocarinatus* Shreve, 1934 (currently *Bothriechis oligolepis albocarinatus*) (Reptilia, Serpentes): proposed conservation of the specific and subspecific names by the designation of a neotype for *T. pulcher*

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Abstract. The purpose of this application is to conserve, by designation of a neotype for *Lachesis* (or *Bothrops* or *Porthidium*) *pulcher* (Peters, 1863), the accustomed usage of this name for a terrestrial species of pitviper (family VIPERIDAE) from Colombia and Ecuador, and of *Bothriechis oligolepis albocarinatus* (Shreve, 1934) for an arboreal pitviper from Ecuador and Peru. The specific name *pulcher* was originally based on a specimen of *albocarinatus* but has been universally misapplied since Boulenger (1896).

Keywords. Nomenclature; taxonomy; Reptilia; Serpentes; snakes; *Bothrops pulcher*; *Bothriechis oligolepis albocarinatus*; Colombia; Ecuador; Peru.

1. W. Peters (1863, p. 672, footnote) proposed the name *Trigonocephalus pulcher* on the basis of one specimen collected in Ecuador ('Quito') and purchased from Brandt (R. Günther, Berlin, in litt.). Boulenger (1896, pp. 530, 539) was the first herpetologist to use the specific name *pulcher* (as *Lachesis pulcher*) after the original description. Subsequent authors have all followed Boulenger's (1896) usage and applied the specific name *pulcher*, in combination with the generic names *Lachesis* Daudin, 1803 or *Bothrops* Wagler, 1824, to a terrestrial species of pitviper found along the Pacific slopes of the Andes from southern Colombia (Valle del Cauca) to El Oro province of Ecuador.

2. The female holotype of *Trigonocephalus pulcher* Peters, 1863 is deposited in the Zoologisches Museum der Humboldt-Universität in Berlin (catalogue no. ZMB 3868). It has 21 dorsal scale rows around the mid-body, 173 ventrals, 61 mostly paired subcaudals and a dorsal colour pattern consisting of dark transverse bands on a green ground colour (see Schätti & Kramer, 1993, fig. 1). The specimen is identical with those identified as *Bothriechis oligolepis albocarinatus* (Shreve, 1934), an arboreal pitviper found in cloud forest and upper rainforest up to 2000 metres from southern Colombia (Putumayo) and the Amazonian basin of Ecuador eastward to the vicinity of Iquitos in Peru.

3. Schätti & Kramer (1993) concluded that *Bothrops albocarinatus* (recte *albocarinatus*) Shreve, 1934 (p. 130), described from a female specimen from the 'Pastaza River, from Canelos to the Marañon River', which is now housed in the Museum of Comparative Zoology, Cambridge, Massachusetts (catalogue no. MCZ 36989), and the snake originally named *Lachesis bilineatus* var. *oligolepis* Werner, 1901 (p. 13) from Bolivia are conspecific. The latter taxon, known as *Bothriechis oligolepis oligolepis*, has a distribution from south of the depression of Huancabamba in Peru through the Cordillera Central and Cordillera de Carabaya including adjacent areas of Bolivia.

4. Amaral (1923, p. 104, footnote 4) pointed out the discrepancy in ventral scale counts between the holotype of *Trigonocephalus pulcher* Peters, 1863 and the two female specimens from 'Quito' and the Cordillera de Intag in Pichincha province of Ecuador kept in the Natural History Museum, London and referred by Boulenger (1896, p. 539) to *Lachesis pulcher*. Boulenger's material actually belongs to a species with a comparatively stout body, strong tubercular keels on the dorsal scales, and a characteristic pattern made up of triangular or slightly semi-circular lateral blotches on a reddish-brown to greyish-brown ground colour as well as a conspicuous dark triangular spot below the eye. Schätti & Kramer (1991) followed general usage in applying the name *pulcher* to this terrestrial Pacific pitviper but, on discovering that the Berlin holotype of *pulcher* was a specimen of the arboreal *Bothriechis oligolepis albocarinatus* (para. 2 above), Schätti & Kramer (1993, p. 258, fig. 3) described the terrestrial species under the new name *Porthidium almawebi*. The male holotype of this nominal species is in the Muséum d'Histoire Naturelle, Geneva (catalogue no. MHNG 2248.12).

5. If the Code were to be strictly applied the specific and subspecific names of *Bothriechis oligolepis albocarinatus* (Shreve, 1934) would be replaced by the senior synonym *pulcher* Peters, 1863, with *B. pulcher oligolepis* (Werner, 1901) as a subspecies. However, *pulcher* has never been used for the Amazonian species for which Peters (1863) proposed it, whereas the junior name *albocarinatus* has been consistently applied to the taxon since 1934. It would be undesirable to move the name *pulcher* to a snake which is not even congeneric and, for the sake of stability, Schätti & Kramer (1993) continued to use *albocarinatus* for the Ecuadorian forest pitviper because it is a well established name which has been consistently used since its description. Some important recent works in which the names *pulcher* and *albocarinatus* have been used, under *Bothrops* Wagler, 1824 and *Bothriopsis* Peters, 1861, for the terrestrial and arboreal species of pitviper respectively are J. A. Peters (1960), J. A. Peters & Orejas-Miranda (1970), Burger (1971), Hoge & Romano-Hoge (1981), Campbell & Lamar (1989) and Pérez-Santos & Moreno (1991). A representative list of a further 20 publications by 16 authors from 1911 to 1992 which include one or both names under various generic names including *Lachesis* Daudin, 1803 and *Bothriechis* Peters, 1859 is held by the Commission Secretariat.

6. We propose that the universal usage of the name *pulcher* (in combination with *Lachesis*, *Bothrops* or *Porthidium*) for a terrestrial species of pitviper from Colombia and Ecuador be maintained by setting aside the Berlin holotype as the name-bearing specimen and designating a neotype in accord with this usage. This action will remove *pulcher* from the synonymy of *albocarinatus*, so allowing the usage of the latter name to be maintained also. This approach is in accord with the Code, which

urges stability in the use of names (and stability is particularly important in the case of poisonous snakes). We propose that the holotype of *Porthidium almawebi* Schätti & Kramer, 1993 be designated the neotype of *pulcher*. We select this specimen rather than one of Boulenger's (para. 4 above) because the *almawebi* holotype is very well documented and has been illustrated (see Schätti & Kramer, 1993) and, moreover, is a male. The name *almawebi* (which has been used only once, by Golay et al., 1993, p. 83) will be rendered a junior objective synonym of *pulcher*, thus eliminating any possible future confusion about its status.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous type fixations for the nominal species *Trigonocephalus pulcher* Peters, 1863 and to designate as neotype the male specimen (catalogue no. MHNG 2248.12) in the Muséum d'Histoire Naturelle, Genève;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *pulcher* Peters, 1863, as published in the binomen *Trigonocephalus pulcher* and as defined by the neotype designated in (1) above;
 - (b) *alboacarínatus* Shreve, 1934, as published in the binomen *Bothrops alboacarínata* (recte *alboacarínatus*);
- (3) to place on the Official List of Rejected and Invalid Specific Names in Zoology the name *almawebi* Schätti & Kramer, 1993, as published in the binomen *Porthidium almawebi* (a junior objective synonym of *Trigonocephalus pulcher* Peters, 1863).

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